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Othman Obeidat dr.othmanobeidat@bau.edu.jo

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Role of the Internet in Narrowing the Digital Divide between the Members of the Jordanian Society during the Coronavirus Crisis

Othman Abdulkader Obeidat

Library and Information Management Department, Al-Salt College for Human Sciences, Al-Balqa Applied University, Jordan.

P.O. Box: Al-Salt 19117, dr.othmanobeidat@bau.edu.jo

Mob: 00962-77 200 55 43; T.W: (+962-5) 3491111 / 3566; T.H. +962 6 5 23 11 24

Abstract

The goal of this research was to see how the internet helped to bridge the digital divide between Jordanians during the Coronavirus outbreak. A quantitative approach is adopted. 210 questionnaire forms were distributed randomly to the members of the sample through using: (https://docs.google.com). They were distributed using email and WhatsApp. 200 forms were analyzed. They represent 95% of the distributed forms. The questionnaire consists of 20 statements. It was found that there is a digital divide between the members of Jordanian society. It was found that the availability of smart devices and the internet enables the members of Jordanian society to overcome this divide. Such availability enables the members of the Jordanian society to acquire knowledge, including knowledge about the Coronavirus. The current study was carried out during the Coronavirus outbreak. As a result, it will play an important role in closing the digital divide between members of Arab societies in general and Jordanians in particular. It will play an important role in encouraging Jordanians to work together with policymakers to enhance the country's IT infrastructure. The present study adopts a simple methodology for measuring the digital divide between the members of the Jordanian society during the Coronavirus crisis. Narrowing this divide is needed in the light of having many sectors not operating. The present study is the first study in the world that aimed to measure the impact of the Coronavirus crisis on the digital divide. The researcher aimed to explore that, because of the Coronavirus crisis-affected internet users in Jordan.

Keywords: Digital Divide, Internet, Smart Devices, Local Community, Coronavirus, Jordan.

Introduction

During the Coronavirus crisis, the use of the internet increased dramatically. Such increasing use obliged IT specialists to develop the web. In this regard, Heaven (2000) suggests that the use of the internet has become something essential to communicate with people. He adds that people use the internet to work, learn, talk to people and entertain themselves. He adds that all people use the internet much. Between (January- March 2020), the use of the internet by people increased dramatically in many countries. That was concluded through the statements made by

the management of (Cloudfare). Cloudfare is an American company that develops the networks of companies worldwide. The management of Cloudfare stated that the delivery of some online services has dramatically increased during the latter period. Such services include the following ones:

- During this, people interactive video calls were highly made to communicate with colleagues, friends, and family members
- During this, people use a video-conferencing program named (Zoom) increased.
- During this, people started to entertain themselves at home. Thus, the use (Steam) has significantly increased during this period. Steam is an online electronic store for smart games. By the end of the first week of April, the records indicate that more than 24 million players were playing at the same time.
- During this, people's use of online grocery stores dramatically increased. Thus, thousands of online customers were waiting in virtual lines in these stores for hours (Heaven, 2020).

To meet the study's goals, it is necessary to identify the meaning of the internet in Jordan. Internet was provided in Jordan for the first time during the mid1990s. In 1997, the public telecommunications institution was established. This institution is owned by the state. Till 2004, it was the only institution that delivers telecommunication services. During the latter year, it sold its shares to France Telecom. Later on, France Telecom owned 51% of the shares in the local market (Menassat, 2007).

In Jordan, the management of public and private companies has become highly aware of the significance of using the internet. Therefore, by the end of 2019, there were about 9.1 million internet subscriptions. That is attributed to the increasing use of the web in all areas (Alghad, 2010). Today, there are eight internet services providers. The national information center (NIC) is the main provider of the internet server. It holds workshops and training courses about the use of optical fibers and other techniques. It provides leased lines and ADSL for several public institutions. It provides the 5G service. Today, there are seven internet providers in the private sector. Due to the increasing competition, people's access to ICT has become easier. Therefore, the number of Broadband subscriptions has increased. By the end of 2019, there were 8.7 Broadband subscriptions. These Broadband subscriptions represent 95.6% of the overall registered subscriptions.

In the end, there must be studies identifying the way people should adjust themselves to the use of the internet. That is needed in light of the increasing use of the internet. There are problems facing people when using the internet. Such problems include the difficulty to catch the Wi-Fi network and the disconnection of the call. Despite these obstacles, the Coronavirus crisis led to increasing the use of the internet. Therefore, the goal of this study was to look into the role of the

internet in closing the digital gap. between the members of the Jordanian society during the Coronavirus crisis.

Study Objectives:

The present study aimed to:

- 1) Explore the digital divide among the internet users in Jordan.
- 2) Identify the extent of prevalence of IT in homes during the Coronavirus crisis.
- 3) Identify the role of the internet in narrowing the digital divide between the members of the Jordanian society and developing Jordanian society.

Study Question

The present study aimed to answer the following question: How could the use of IT (computers and access to the internet) narrow the digital divide between the members of the Jordanian society and expand the Jordanian society's knowledge?

Study Significance:

The results of this study are beneficial for the bodies delivering internet and decision-makers. They shall enable decision-makers and the management of those bodies to realize the significant role of the internet in narrowing the digital divide between the members of society. They shall enable decision-makers and the management of those bodies to realize the role of the internet in developing society and making effective plans. In addition, the present study offers a theoretical framework that assists researchers who want to conduct similar studies.

To be more specific, the following are some of the reasons why this research is vital:

- 1) The results shall encourage decision-makers to develop the web to use it for promoting knowledge. Such knowledge shall enable people to acquire new skills and improve their business.
- 2) The results shall encourage decision-makers to develop the IT infrastructure. That shall develop the society and national economy. It shall expand the knowledge of the members of the society.
- 3) The results shall encourage decision-makers to address the challenges facing internet users by taking several measures. Such measures include: providing internet users with training courses about the way of using IT

Study Methodology:

To meet the study's goals, a survey-based approach was adopted. To be specific, the researcher used a questionnaire to collect data from the members of the local community about the use of smart devices for obtaining information in general, and Coronavirus-related information. 210 questionnaire forms were distributed randomly to the members of the sample through using:

(https://docs.google.com). They were distributed using email and WhatsApp. 200 forms were retrieved and analyzed. 200 forms were analyzed. They represent 95% of the distributed forms. The SPSS program was used. The questionnaire consists of 20 statements. The first section of the questionnaire collects demographic data. The second question of the questionnaire collected data about the patterns of using the internet. It collects such data to measure the digital divide in Jordan. It collects data about the type of device used to get connected to the internet. It collects data about the duration of using the internet. It collects data about the obstacles hindering the respondents from getting connected to the internet. The Likert scale is adopted.

Review of Literature:

The web is considered a major source of information worldwide. It's used in all areas. It's also used by public bodies. It's used for providing online services by public bodies. Such delivery increased during the spread of Coronavirus. For instance, the Coronavirus crisis obliged forced several governments to close institutions temporarily. Therefore, during this crisis, the members of the Jordanian society spent much time on smart devices to acquire the latest information.

The goal of this research was to give some insight into the realities of employing smart devices to get connected to the internet. There aren't comparative studies conducted in this regard during the Coronavirus crisis. As for the available literature, it sheds a light on the role of the internet in narrowing the digital divide between developing and developed countries. The literature that sheds a light on the role of the internet in narrowing the digital in Jordan, in particular, is part of the Arab world, is scarce.

The meaning of the expression (digital divide)

The number of internet users has been dramatically increasing during the recent year. The International Communication Union declared that 60% of the world's population are internet users at the beginning of 2020. Internet and ICT are used by people for meeting social and educational goals. Recently, several studies were conducted about the advantages of using the web. It should be noted that the internet is used by people of various cultural, language, and economic backgrounds.

The present study sheds a light on the barriers hindering people from using the internet during the Coronavirus crisis. Wright (2003) suggests that the impacts of technology and the economic transformations negatively affect the social stratification and expand the divide between classes (p. 6). Wright offers light on how internet users use the internet to achieve their objectives. He discusses the internet's effect in widening the gap between social classes. He discusses the importance of the internet. in promoting inequality. For instance, the internet is not used much by people living in developing countries.

Heuertz (2003) sheds a light on the expression (digital divide). He suggests that possessing knowledge and skills plays a significant role in accessing electronic information and assessing it.

Due to the technological development and use of smart devices, people are increasingly realizing that the digital divide isn't limited only to people's access to the internet and technologies. In this regard, there are several issues associated with the digital divide. Several reasons are leading to the digital divide, such as language, literacy, lack of local information on the web, and there isn't cultural diversity (Warschauer, 2003; Munster, 2005).

For developing countries to narrow the digital divide, they must address the problems hindering people from accepting and using the internet. Refrainment from addressing such reasons shall accept the prevalence of ICT. In addition, it's challenging for the governments of Arab countries to develop the IT infrastructure. Several research has shed light on the significance of local culture in supporting technological innovation. In this regard, several studies suggest that the social and cultural norms in Arab countries positively and significantly affect the development and prevalence of ICT (Loch et al., 2003).

ICT in Jordan:

In Jordan, the government adopted an approach to keep up with the latest technological developments. Through this approach, people can use ICT in productive sectors. That shall positively affect the economic growth.

Information technologies are highly used in the public and private sectors in Jordan. They are used since 1921. Since the latter year, the telecommunication sector has been significantly improving. It contributes significantly to the national income. During the end of the 1960s, the first computer system was used in Jordan. By the end of 1987, 17% of the employees in the public sector were using computers. Based on several studies, public institutions worldwide started using information technologies early. In 19777, the use of computers became significantly prevalent in Jordan (Al-Jaghoub and Westrup, 2003, Ahmad and Zink, 1998).

Between the 1990s-1980s, the use of computer systems became significantly prevalent in public institutions. The public telecommunications institution in Jordan was privatized in 2004. That enabled Jordan to keep up with the latest developments in the field of technology. An advanced telecommunication system was used.

Through developing the local telecommunication system, establishing a ground station, and using optical fibers, the Jordanian telecommunication corporation became capable to overcome the technical and financial problems facing the telecommunication sector.

Recently, the Jordanian telecommunication corporation established several partnerships with several corporations in various Arab countries. The management of the Jordanian telecommunication corporation believed that the digital divide can be narrowed through enacting public policies that facilitate the delivery of telecommunication services at reasonable prices

(Global investment House, 2006). The management of public and private institutions acknowledges the significance of IT in improving services. The attention provided by King Abdullah II for the improvement of ICT in Jordan had several positive impacts on Jordan.

The Jordanian government carried out several studies and made several developments in the field of ICT. These studies and developments with the state's vision. The state's vision aims at developing the ICT sector in Jordan. It aims at utilizing the citizens' potentials to achieve economic growth, improve competitiveness and generate job opportunities (Higher Council for Youth, 2004).

Due to the developments in the ICT field in Jordan, Jordan became a leading country in the field of ICT. The spokesperson of the Ministry of Digital Economy and Entrepreneurship (2007) in Jordan suggests that the research and development strategies aimed at:

- 1) Ensuring that ICTs are used effectively by employees in all the significant economic sectors. These strategies also aim at promoting the use of ICT.
- 2) Fostering growth and improving the competitiveness of the ICT sector.
- 3) Creating labs and warehouses and setting standards for using such facilities
- 4) Improving the IT infrastructure and providing citizens with IT services of high quality and reasonable prices.

The IT services delivered in Jordan have significantly improved. Electronic information has been increasingly used. Therefore, 250 knowledge stations were established in various areas in Jordan. That enables the members of the Jordanian society to acquire ICT skills regardless of their socioeconomic status. These skills shall enable those people to become more productive and informative. They shall enable those people to improve their socio-economic status (National Information Technology Center, 2007).

Although the resources are limited in Jordan, ICT is effectively used in Jordan. Several other areas must be provided with attention. Policymakers in Jordan realize that is an urgent need for utilizing the features of ICT in various areas in the public and private sectors.

Internet service in Jordan

During the early 2000s in Jordan, internet cafés were the mean used the most by citizens for using computers and the internet. They were highly used by the students and young people who didn't have computers or were incapable of paying the fees of the internet subscription. During the latter period, there were about 500 internet cafes in Jordan. The age of most of the customers of those internet cafes is within the age of (18-22) years. In 2000, 2.4% of the population in

Jordan were internet users. In this year (2020), 89% of the population in Jordan are internet users. Such an increase is attributed to the use of the 4G and 5G networks. It's considered a dramatic increase in comparison with other Arab countries. However, the latter percentage is lower than the counterpart percentages in Western and advanced countries. Although several developments have been achieved in the ICT field in Jordan, there is still a digital divide between the members of the Jordanian society (International Telecommunication Union, 2008).

In 2020, the Ministry of Digital Economy and Entrepreneurship in Jordan was transformed into the Ministry of digital economy & entrepreneurship. The mission of the latter ministry is represented in (creating secure and sustainable digital sectors to have a society whose members are connected). The strategies goals of the latter ministry aim at expanding the activities that aim at handling the social responsibility in all cities. (REACH) the initiative includes an action plan that targets a period that ends in 2025. This plan utilizes the available opportunities in the IT field in Jordan. It aims at making Jordan a leading country in the field of the digital global economy. It aims at establishing a digital economic sector in Jordan. It aims at enabling people, sectors, and companies in Jordan to increase their productivity and achieve growth and development. It aims at enabling companies in Jordan to attract investors and achieve international partnerships. It aims at making the Jordanian business environment a stable environment. It aims at providing Jordan to have creative and innovative leaders in the field of IT in various sectors and markets. It aims at promoting an entrepreneurial culture in Jordan. It aims at providing support to the ones who possess expertise in sub-fields. It aims at providing support to the digital economy to promote innovation and establish partnerships with international companies. It aims at promoting innovation through facilitating people's access to technology, data, and standards. It aims at promoting the use of digital technologies in various sectors, such as healthcare, energy, clean technology, education, finance, telecommunication, security, etc. (REACH, 2020).

Study Instrument

The present study collects primary data by using the questionnaire. The questionnaire was developed based on the previous studies and the theoretical framework. It consists of two parts. The first part collects demographic data from the respondents. The second part consists of two sub-parts. These sub-parts are:

The first sub-part: Collects data about the extent of using smart devices. It collects data about access to the internet.

The second sub-part: Collects data about the extent of using the internet and its impact on promoting knowledge in the Jordanian society

210 questionnaire forms were distributed to the sample. 10 forms were excluded due to missing data. 200 forms were analyzed. They represent 95% of the distributed forms. The data were

analyzed using the SPSS program. The data were analyzed using descriptive statistics. For example, the researcher calculated methods to determine the influence of employing IT on Jordanian society development. It was decided to use the Likert scale. There are five different levels of agreement: strongly agree, agree, neutral, disagree, and strongly disagree. The following scores are represented by these categories: 5, 4, 3, 2, and 1. they are shown in table (1):

Table 1- displays the Likert scale's rating categories.

| Extent | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|--------------------|-------------------------------------|----------------------|----------------------------|---------------------------------|----------------------------------|
| Score | 1 | 2 | 3 | 3 4 | |
| Percentage | Less than 20% | 20-40% | 40-60% | 40-60% 60-80% | |
| Relative weight | Degree of influence of non-existent | Influence is minimal | The extent to which medium | The significant amount of power | The extremely high level of sway |

Validity

The initial version of the questionnaire was sent to numerous specialists to check that it was straightforward and provided trustworthy findings. Those specialists are experts in the field of information technology. The questionnaire, according to the experts, produces solid results. In addition, the Cronbach Alpha coefficient value was calculated to assess the questionnaire's reliability. The latter value is 86.4%. It indicates that the questionnaire offers reliable results.

Descriptive statistics

Demographic data:

The first part includes five items that collect demographic data from the respondents. Such data includes data related to their gender, age, and academic credentials.

Table 2- shows the gender distribution of the sample.

| Categories | Frequency | % |
|------------|-----------|-------|
| Female | 102 | 51.0 |
| Male | 98 | 49.0 |
| Total | 200 | 100.0 |

Based on table-2. 49% of the respondents are males and 51% of the respondents are females. These percentages represent the percentages of internet users.

Table (3): Distribution of the sample by the age

| Categories | Frequency | % |
|------------|-----------|---|

| 20-29 | 108 | 54.0 |
|-----------|-----|-------|
| 30-39 | 56 | 28.0 |
| 40-49 | 26 | 13.0 |
| 50-Upward | 10 | 5.0 |
| Total | 200 | 100.0 |

Table (3) shows that 5% of the respondents are 50 years old or older. Thirteen percent of the responders are between the ages of 40 and 49 years old. The majority of the responders (54%) are between the ages of 20 and 29. Twenty-eight percent of the respondents are between the ages of 30 and 39. These figures can be explained by the fact that the percentage of illiterate people is highest among those over the age of 50. According to them, the bulk of internet users is between the ages of 20 and 29. This could be because the majority of individuals who use smart devices are young.

Table 4- shows how the sample was distributed according to academic qualifications.

| Categories | Frequency | % |
|---|-----------|-------|
| Less than tawjehi (Secondary) certificate | 22 | 11.0 |
| Tawjehi certificate | 36 | 18.0 |
| Diploma degree | 36 | 18.0 |
| Bachelor degree | 86 | 43.0 |
| Master degree | 10 | 5.0 |
| Doctoral degree | 10 | 5.0 |
| Total | 200 | 100.0 |

The distribution of the sample by academic credentials is shown in Table (4). That is done to explore the capability of Jordanian society in using smart devices and accessing the internet. 43% of the respondents hold a bachelor's degree. This percentage is the highest. 5% of the respondents hold an MA degree and 5% of the respondents hold a Ph.D. degree. The ones who hold MA or Ph.D. degrees don't access the internet much because those people are busy teaching students online.

Based on table (5), 48% of the respondents work in the public sector. This represents the highest percentage. 20 % of the respondents have retired. 14% of the respondents work in the private sector. 18% of the respondents don't work.

Table 5- Distribution of the sample by occupation

| Categories | Frequency | % |
|-------------------|-----------|------|
| Government sector | 96 | 48.0 |
| Private sector | 28 | 14.0 |

| Superannuation (Retired) | 40 | 20.0 |
|--------------------------|-----|-------|
| Not work | 36 | 18.0 |
| Total | 200 | 100.0 |

The use of information technology (IT)

The second part of the questionnaire collects data about the extent of using information technologies by the members of the Jordanian society. It collects data about access to smart devices and getting connected to the internet during the Coronavirus crisis. It collects data about the impact of the internet on the respondents' lives, and the acquisition of knowledge during the Coronavirus crisis.

Through an open-ending question, The respondents were requested to indicate the sort of internet-connected connected device they use. It was found that 92% of the respondents use mobile phones to get connected to the internet. It was found that 57% of the respondents have been using the internet for 6 years or more.

The respondents were asked to identify the reasons for using the internet during the Coronavirus crisis. It was found that 86% of the respondents use the internet for sending and receiving messages through WhatsApp. This reason is ranked first. The reason that's ranked second is represented in using the internet for acquiring information about the Coronavirus (Table 6).

Table 6- Reasons for using the internet at home during the Coronavirus

| | Statements | Strongly Disagree 1 | Disagree 2 | Neutral 3 | Agree 4 | Strongly Agree 5 | Mean |
|----|---|---------------------------|-------------|--------------|-------------|------------------------|------|
| 1. | I use the internet to send and receive WhatsApp messages. | 8 4.0% | 12 6.0% | 8 4.0% | 72 36.0% | 100 50.0% | 4.26 |
| 2. | 1. I'm looking for information about the Corona virus on the internet. | 10 5.0% | 8 4.0% | 22 11.0% | 70 35.0% | 90 45.0% | 4.11 |
| 3. | I am interested in learning more information about the use of the Internet | 32 16.0% | 32 16.0% | 52 26.0% | 56 28.0% | 28 14.0% | 3.08 |
| 4. | I realize the benefits of using the Internet | 22 11.0% | 42 21.0% | 40 20.0% | 70 35.0% | 26 13.0% | 3.18 |
| 5. | Searching for information through surfing the web is easier than searching for information through using traditional sources | 10 5.0% | 8 4.0% | 40 20.0% | 62 31.0% | 80 40.0% | 3.97 |
| 6. | The web includes information | 18 | 4 | 28 | 80 | 70 | 3.9 |

| | related to my interests and culture | 9.0% | 4.0% | 14.0% | 40.0% | 35.0% | |
|----|--|-------------|------------|-------------|-------------|-------------|------|
| 7. | The web has become the most important source for expanding my knowledge | 12 6.0% | 4 4.0% | 34 17.0% | 78 39.0% | 72 36.0% | 3.97 |
| 8. | Since I began using the Internet, I have spent less time using paper-based information resources | 20 10.0% | 14 7.0% | 38 19.0% | 78 39.0% | 50 25.0% | 3.62 |

Based on these results, the members of the Jordanian society have positive attitudes towards using the internet for carrying out activities and expanding their knowledge. The benefits of utilizing the internet are acknowledged by 48 percent of respondents, who either agree or strongly agree. A BA or a high degree is held by 53% of those who responded. The internet is the most significant source for improving one's knowledge, according to 71 percent of those who agree or strongly agree.

It was found that respondents realize the benefits gained from using information technologies (i.e. using smart devices and accessing the internet). Such benefits include expanding knowledge and the easiness of using information technologies. Most of the respondents suggest that the web is the most important mean for acquiring knowledge during the Coronavirus crisis. They suggest that the web can be easily accessed during the Coronavirus crisis. During the Coronavirus crisis, the extent of using smart devices and the extent of accessing the internet has significantly increased. That is because people want to be familiar with the latest news related to the Coronavirus.

The reasons for the digital divide

Based on the relevant literature, the severity of the digital divide in developing countries has been increasing slowly. During the early 1990s, several debates were carried out about the forms of the digital divide in developed countries. During the beginning of the 21st century, studies on the digital divide were carried out in developing counties, especially after holding the UN conference in Geneva in 2003 and the UN conference in Tunisia in (2005). In this regard, it should be noted that there is a need for conducting studies that identify the severity of the digital divide locally. Table (7) includes data about the reasons for the digital divide.

Table 7- The reasons for the digital divide

| Statements | Strongly Disagree 1 | Disagree 2 | Neutral 3 | Agree 4 | Strongly Agree 5 | Mean |
|--|---------------------------|-------------|-------------|------------|------------------------|------|
| 1. I lack required skills and knowledge needed for using smart devices and surfing the web | 86 43.0% | 72 36.0% | 14 7.0%% | 16 8.0% | 12 6.0% | 1.98 |

| 2. I don't have access to the internet at home | 14 7.0% | 26 13.0% | 46 23.0% | 72 36.0% | 42 21.0% | 3.51 |
|---|-------------|-------------|-------------|-------------|-------------|------|
| 3. I don't have the time to use the Internet | 22 11.0% | 42 21.0% | 40 20.0% | 70 35.0% | 26 13.0% | 3.18 |
| 4. I lack the desire to use the Internet | 82 41.0% | 72 36.0% | 38 19.0% | 6 3.0% | 2 1.0% | 1.87 |
| 5. There is a lack of support for using the Internet at home | 12 6.0% | 14 7.0%% | 52 26.0% | 70 35.0% | 52 26.0% | 3.66 |
| 6. There is pressure on the network due to having many internet users. There is a lack of support for the distance learning process | 12 6.0% | 16 8.0% | 40 20.0% | 86 43.0% | 46 23.0% | 3.69 |
| 7. Access to the Internet is interrupted due to technical problems or hardware-related problems | 12 6.0% | 16 8.0% | 60 30.0% | 72 36.0% | 40 20.0% | 3.56 |

Based on table (7), 43% of the respondents strongly disagree about lacking the required skills and knowledge needed for using smart devices and surfing the web. 36% of the respondents disagree about lacking the required skills and knowledge needed for using smart devices and surfing the web. 13% a majority of responders agree or strongly agree about lacking the required skills and knowledge needed for using smart devices and surfing the web. More than 75% of the respondents disagree about lacking the desire to use the Internet. The mean in this regard is high (4.06).

There are two reasons behind people's lack of access to the internet. These reasons are 1)-having a high pressure on the Internet due to having many users and 2)-there is a lack of support for the distance learning process. Both of those reasons are attributed to the lack of funding and having poor IT infrastructure. They are also attributed to having inadequate IT services during the Coronavirus crisis. 61% of the respondents either strongly agree or agree that there is pressure on the network due to having many internet users. They either strongly agree or agree that there is a lack of support for the distance learning process during the Coronavirus.

The significance of the internet is one of the issues that are addressed the most in developing and developed countries (Smith, 2003). According to the World Health Organization, the most significant types of inequality include inequality in terms of accessing the internet worldwide. The statistics in this regard are disturbing! According to the International Communication Union (2020), there were 4.1 billion internet users worldwide during 2019. Thus, that indicates that the number of internet users increased worldwide in comparison to the year 2018 by a rate of 5.3%. In 2005, the internet was used by 17% of the global population. In 2019, the internet was used by 53% of the global population. Thus, the increase from 2005 to 2019 is represented at a rate of

10% by each year. In recent years, the global growth rates are not high. That is because the severity of the digital divide between people is high in some developing countries is high. It's because the severity of the digital divide between developing countries and developed countries is high. Chinn and Fairlie (2007) conducted a study during the years (1999-2001) in 161 countries. They explored the impact of the variables listed below on the rates of internet users

- 1. Economic variables: They include: one's income, academic qualification, literacy, business openness.
- 2. Demographic variables: They include: civilization rates and the dependency ratios among young and old people.
- 3. Infrastructure-related variables: They include: the coverage of the electricity and telecommunication services.

The prices of telecommunication services

The rates of internet users are correlated with the rates of development in the area. In all the areas in the world, the rates of access to the internet are higher than the rates of the ones who have computers. That is because the internet can be accessed through other devices. In African countries, the development rates are the least in the world. In African countries, the rates of families that have access to the internet or possess computers are very low. In Arab countries, 91% of the residents have access to 3G or a better network (ITU, 2020).

Discussion and testing the study's hypothesis:

Main Hypothesis: The use of information technology does not affect the development of Jordanian society.

Table 8-T-test results for all the paragraphs of the main hypothesis.

| Variables | Mean | Standard deviation | Value of T | Denote T * |
|-------------------------|------|--------------------|------------|------------|
| first area collectively | 3.52 | 0.3803 | 14.853 | 0.000 |

^{(*):} This sign means that the value is statistically significant at the statistical significance of $(\alpha \ge 0.05)$.

Table (8) sheds a light on the impact of information technology on the development of Jordanian society. It presents the results of the t-test. The mean is 3.52 and the standard deviation is 0.3803. The t value is 14.853 which is statistically significant at the statistical significance of ($\alpha \ge 0.05$). The significance value is equal to 0 As a result, the null hypothesis is dismissed, whereas the alternative hypothesis is accepted.

Table 9-T-test results for all the paragraphs of the first area collectively

| Variables | Mean | Standard deviation | Value of T | Denote T * |
|-------------------------|------|--------------------|------------|------------|
| first area collectively | 3.51 | 0. 3994 | 13.955 | 0.000 |

(*): This sign means that the value is statistically significant at the statistical significance of $(\alpha \ge 0.05)$

The first sub-hypothesis: The use of smart devices and the Internet doesn't have any statistically significant impact - at the statistical significance of ($\alpha \ge 0.05$)- on the development of society.

The first sub-hypothesis sheds a light on the impact of using smart devices and the Internet on the development of Jordanian society. Table (9) presents the results of the t-test in this regard. It was found that the mean is 3.51 and the standard deviation is 0.3994. The t value is 13.955 which is statistically significant at the statistical significance of ($\alpha \ge 0.05$). 0.000 is the level of importance. As a result, the null hypothesis is disproved, whereas the alternative hypothesis is accepted.

Table (10) T-test results for all the paragraphs of the second area collectively.

| Variables | Mean | Standard deviation | Value of T | Denote T * |
|--------------------------|------|--------------------|------------|------------|
| Second Area Collectively | 3.52 | 0. 3803 | 14.853 | 0.000 |

^{(*):} This sign means that the value is statistically significant at the statistical significance of $(\alpha \ge 0.05)$.

The second sub-hypothesis: The use of the internet doesn't have any statistically significant impact - at the statistical significance of ($\alpha \ge 0.05$)- on the development of the Jordanian society.

The second sub-hypothesis sheds a light on the impact of using the internet on the development the Jordanian society. Table (10) presents the results of the t-test in this regard. The mean is 3.52 and the standard deviation is 0.3803. The t value is 14.853 which is statistically significant at the statistical significance of ($\alpha \ge 0.05$). The significance value is 0.000. Thus, the null hypothesis is rejected and the alternative hypothesis is accepted.

Results and Discussion

During the Coronavirus outbreak, the findings of this study shed light on the importance of internet services in closing the digital divide amongst Jordanians. They don't shed a light on issues related to the development of ICT and issues related to funding.

To be more specific, the present study aimed to answer the following question: How could the use of information technologies (the use of smart devices and access to the internet) narrow the digital divide, achieve development, and expand people's knowledge in Jordan?) The digital gap is attributable to inequality and social and cultural diversity, according to the findings of this study.

The Jordanian government identified its policy for achieving national development and growth. This policy sheds a light on the relationship between development from one hand and access to ICT (i.e. access to smart devices, and the internet) from another hand. Therefore, all the problems that hinder people from accessing ICT (i.e. accessing smart devices and the internet)

must be addressed. That can be achieved through improving the IT infrastructure and increasing the funds dedicated to IT.

It was a fund that the members of the Jordanian society have adequate knowledge about the use of ICT. It was a fund that the members of the Jordanian society have access to the internet. The Jordanian government established 250 knowledge stations in various cities in Jordan. It established these stations to promote access to the internet and smart devices. It seeks to carry out ICT-related research. Given the foregoing data, the researcher feels that Jordan's IT infrastructure has to be greatly improved. Such development shall reduce the severity of the digital divide in Jordan.

The researcher also believes that the role of the Ministry of digital economy & entrepreneurship must be activated in delivering digital services. He believes that this ministry must promote access to ICT among all the members of the Jordanian society. That can be done through:

First: The decisions makers and specialists in the IT field must promote awareness among people about the advantages of using ICT. They must inform scholars on the most recent breakthroughs in the field of information technology.

Second: More training options for internet users should be provided by the Ministry of Digital Economy and Entrepreneurship. It must utilize knowledge stations effectively. That shall participate in achieving national development.

The present study provides significant data about the severity of the digital divide in Jordanian society. This study's findings represent Jordanian society's current state of development. Historical, religious, social, and cultural issues are all involved. It's linked with the cultural circumstances of the Arab world. The researcher of the present study recommends the following.

- Providing societies with assistance to overcome the cultural barriers hindering them from accessing the ICT. The researcher recommends providing societies with assistance to achieve development in healthcare, education, security, etc. areas.
- Improving the ICT services and the national strategies to promote collaboration in the field of ICT. The strategies plan in REACH includes efforts exerted by the government during the period (2020-2025) in the field of ICT.
- Engaging people in the implementation of the governmental policies that aim at promoting the use of ICT and utilizing ICT for solving contemporary problems in society
- Collecting data about people's access to technology. The researcher recommends
 engaging people in implementing strategies that aim at solving the problems hindering
 them from using ICT. He recommends engaging people in the process of utilizing ICT
 effectively.

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About the author

Othman Obeidat, Head of Information and Library Management Dept. and teaches at the Faculty of Al-Salt for Human Sciences at Al-Balqa' Applied University in Jordan. Othman Obeidat is the corresponding author and can be contacted at: dr.othmanobeidat@bau.edu.jo

Cell: 00962772005543

T.W.: 00962-5- (3491111) / 3566